

EXHIBIT E



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VIA EMAIL

George C. Summerfield
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RE: Charter Pacific Corporation Ltd. Patent Portfolio

Dear George,

I write to follow up on our May 5, 2020 telephone discussion and in response to your March 19, 2020 letter to Apple regarding Charter's licensing and enforcement of its patent portfolio. Continuing previous correspondence on the matter, your March 19 letter once again discussed and included a claim chart for claim 1 of U.S. Patent No. 9,665,705 and also included a claim chart for claim 13 of the '039 patent. As we indicated during our call on May 5, after careful review of the '705 and '039 patents, the claim charts you provided, the parties' earlier discussions, and other relevant materials, we continue to believe that Apple does not require a license.

With respect to the '705 patent, your letter suggests that claim 1 reads on Apple's Touch ID devices. As I explained during our call, our previous analysis of the '705 patent is unaffected by your letter and claim chart. In particular, you continue to allege that the "transmitter" required by the patent is met by the Touch ID home button and the part of the Secure Enclave that compares the read biometric data to the representation saved in the Enclave, and that the required "receiver" is the part of the Secure Enclave processing that signal to allow access when there's a match. *See* March 11 claim chart at 1-2. Thus, you accuse the Secure Enclave of being both the transmitter and the receiver, when the patent clearly requires two separate sub-systems.

We also previously explained the patent claims are directed to a controller/transmitter and controller/receiver that are two separate systems that communicate wirelessly. In your March 19 correspondence, you argued that the specification describes both wireless and wired systems. During the May 5 call, you indicated that you have found nothing in the file history to suggest that the claims are limited to wireless systems. The applicants, however, made clear that their invention was limited to wireless systems. Specifically, in the parent application of the '705 patent, the applicants argued over prior art that used a wired system stating the claimed "transmitter sub-system" is "clearly part of a wireless based system when read in the context of the specification as a whole." August 26, 2014 Remarks in U.S. Patent No. 9,269,208.

You further contend that the initial registration of a user's fingerprint with Touch ID meets the claim requirement of receiving a series of entries of a biometric signal characterized by a number and duration of entries which is mapped to an instruction. Enrollment of a user's fingerprint for Touch ID does not, however, require a series of entries characterized by a specific number and duration of entries. And that series is not mapped to an instruction as required by the claim. On our call you suggested that there is nothing in the prosecution history that requires the series of entries to be of a predetermined number or duration. During prosecution of the parent application, however, the applicants stated that the invention is directed to receiving "a succession of biometric signals which the user ensures are of a predetermined duration, predetermined quantity, and being input within a predetermined time." August 26, 2014 Remarks in U.S. Patent No. 9,269,208. Registration for Touch ID does not involve a predetermined duration, predetermined quantity, or a predetermined input time.

Your allegations with respect to the '039 patent are similarly flawed. Specifically, you contend that use of the virtual Apple Card in conjunction with Touch ID meets the limitations of claim 13. Although you suggested on our call that there was nothing in the intrinsic record limiting the '039 patent claims to a physical card, a review of the specification makes clear the patent is discussing a physical device (be it a credit card, smart card, or fob). The specification notes that all card devices "contain card information that is accessed by 'coupling' the card device to an associated card reader." Col. 1:20-25. Each example given is a physical device; a standard credit card, a smart card, a wireless key-fob. *Id.* at 1:33-58. Use of a virtual Apple Card does not meet the "card device" requirement of the '039 patent.

Nor is the Secure Enclave a "card device reader" as your claim chart contends. The specification explains that a reader is "coupled" to a card to receive card data. *Id.* at 1:22-25. Every description in the specification involves a physical device that needs to be swiped or inserted into a card reader. There is no "coupling" between the virtual Apple Card in the wallet app and the Secure Enclave.

The claim also requires a "means" for defining, dependent upon the received card information, a memory location external to the card. You contend that this is the memory of the Secure Enclave where biometric data is stored. But the storage of a user's biometric data in the Secure Enclave is not dependent upon any received card information relating to Apple Card. Enrollment of a user's fingerprint in Touch ID and the Secure Enclave is independent of use of Apple Card. Finally, you indicate that the "means" for this limitation is software, but there is no corresponding algorithm disclosed in the specification to describe this "means." Therefore, the claim is also likely invalid.

Therefore, for at least these reasons, Apple believes that it does not need a license to Charter Pacific's portfolio. The reasons discussed above are merely examples of why Apple does not need a license, and are not exhaustive. We reserve any omitted non-infringement, invalidity, or other defenses. If you disagree with our assessment, please provide a detailed explanation of your position.

Sincerely,

MARTON RIBERA SCHUMANN & CHANG LLP

A handwritten signature in black ink, appearing to read "Carolyn Chang". The signature is fluid and cursive, with the first name "Carolyn" written in a larger, more prominent script than the last name "Chang".

Carolyn Chang